

### United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FII		ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/945,006	09/945,006 08/31/2001		J. Pat Evans	10368/24701	1607
24349	7590	7590 05/04/2006		EXAMINER	
WILLIAM R. GUSTAVSON				STASHICK, ANTHONY D	
SUITE 1185 9330 LBJ FRWY.				ART UNIT	PAPER NUMBER
DALLAS,	DALLAS, TX 75243			3728	
				DATE MAILED: 05/04/2006	5

Please find below and/or attached an Office communication concerning this application or proceeding.

42



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

## BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/945,006 Filing Date: August 31, 2001 Appellant(s): EVANS ET AL. MAY 0 4 2006

Group 3700

William R. Gustavson For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed February 9, 2006 appealing from the Office action mailed August 9, 2005.

Application/Control Number: 09/945,006

Art Unit: 3728

#### (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

#### (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

#### (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

#### (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

#### (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

#### (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

#### (8) Evidence Relied Upon

5,282,326

Schroer, Jr. et al.

02-1994

#### (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

#### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Application/Control Number: 09/945,006

Art Unit: 3728

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Page 3

Claims 1-6, 8-11, 13-15 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by 2. Schroer, Jr. et al. 5,282,326. Schroer, Jr. et al. '326 discloses all the limitations of the claims including the following: an insole 2 having a raised arch support portion (see Figure 5a, area 22) with the peripheral contour of the arch section generally conforming to the longitudinal arch and transverse arch of the plantar surface of a user's foot (see Figures 1 and 3); the peripheral contour is defined by a curve having a first endpoint located on a medial edge of the insole (see Figure 1) generally corresponding to a forward most medial point of the longitudinal arch; a second endpoint located rearward of the first endpoint on the medial edge of the insole (also Figure 1); the curve extends forwardly and laterally (Figure 1) from the first endpoint through a point generally corresponding to a midway point between second and third metatarsal heads of the foot and rearwardly along the medial edge of the fifth metatarsal head of the foot then rearwardly and medially to the second endpoint (see Figure 1); the curve extends across a point generally corresponding to a cuboid of the foot; the raised arch support portion forms part of the foot bed (see Figure 3); the raised arch support portion has a maximum height dimension substantially midway between a first metatarsal head and an Astragalas of the human foot (see Figure 3); the raised arch support portion has a maximum height dimension midway between a Tibialis Anticus of the human foot (see Figure 3); the insole has dimensions that generally correspond to a human foot of predetermined size; the insole is capable of supporting substantially all of the plantar surface of the human foot (see Figure 3); a surface layer 12 provided on the upper surface of the foot bed; the foot bed has a hind foot region and a forefoot region and is made of flexible material (see col. 5, line 49-col. 6, line 66).

Application/Control Number: 09/945,006 Page 4

Art Unit: 3728

#### Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 7, 12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schroer, Jr. et al. 5,282,326. Schroer, Jr. et al. '326 discloses all the limitations of the claims as noted above. Although Schroer, Jr. et al. '326 does not specifically state the height of the arch support portion, it appears that it would have been a mere matter of design testing an evaluation to find what the average height is for the arch portion of a persons foot and use that height to be the support height of the arch support portion since this portion would be used to support the arch of the average user. With respect to claim 16, it is well known in the art of insole making to make the top layer of an insole out of a textile material to aid in giving comfort to wearing the shoe and to aid in wicking away perspiration.
- 5. Claims 42-43 and 45 are rejected under 35 U.S.C. 103(a) as being obvious over Schroer, Jr. et al. 5,282,326 as applied to claim 9 above in view of Official Notice. Schroer, Jr. et al. '326 discloses all the limitations of the claims except for the claimed Shore Hardness, density and Ball Rebound. Official Notice is taken that it is well within the skill of one of ordinary skill in the art to find a material that would meet the desired Shore Hardness density and Ball Rebound to aid in cushion, comfort and stability of the user's foot within the shoe. Therefore, it would have been obvious, to one of ordinary skill in the art at the time the invention was made, to find a polyurethane material that would meet these desired characteristics. Furthermore, since the Ball Rebound value is defined by ASTM standards, it appears that this would not be inventive, as it is a requirement that has already been set to be met.

Application/Control Number: 09/945,006 Page 5

Art Unit: 3728

#### (10) Response to Argument

Responses to appellant arguments, for clarity, will be labeled the same as that which appellant labeled them in the Appeal Brief.

#### VII. Response to Arguments

A. Response to Claims 1-6, 8-11, 13-15 and 17 being patentable over Schroer, Jr. et al.

Appellant argues that there is no disclosure in Schroer, Jr. et al. of an insole that has a raised arch support portion having a peripheral contour generally conforming to the longitudinal arch and the transverse arch of the plantar surface of the human foot. It has been well settled that drawings are part of the disclosure and can teach on that which can be gleaned from what is shown in the drawings. The description of the article pictured can be relied on, in combination with the drawings, for what they would reasonably teach one of ordinary skill in the art. In re Wright, 569 F.2d 1124, 193 USPQ 332 (CCPA 1977). One can readily determine from the figures of Schroer, Jr. et al. where portions fall with respect to the user's foot since this relationship is shown clearly in Figure 3. Therefore, using Figure 3 in conjunction with Figure 1, one can clearly see that the contour shown in Figure 1 supports both the longitudinal arch and transverse arch of the user's foot. (For reference of longitudinal and transverse arches, attached is a 3 page attachment describing and showing these arches). Appellant further argues that the raised portion of Schroer, Jr. et al. shown in the figures being located in the same area, as similarly curved as that claimed in the instant application is irrelevant. The description of the article pictured can be relied on, in combination with the drawings, for what they would reasonably teach one of ordinary skill in the art. In re Wright, 569 F.2d 1124, 193 USPQ 332 (CCPA 1977). Therefore, Schroer, Jr. et al. clearly discloses each and every element of the claimed invention as shown in the drawings.

1. Claim 2 is not patentable over Schroer, Jr. et al.

Application/Control Number: 09/945,006 Page 6

Art Unit: 3728

Appellant argues that Schroer, Jr. et al. does not teach the relationship between the elements of claim 2. This determination from Schroer, Jr. et al. is made with respect to the knowledge that one of ordinary skill in the art is aware of where the bones of the foot are located. Knowing this and looking at the Figures of Schroer, Jr. et al., one can clearly see the relationship between the bones of the foot and the innersole of Schroer, Jr. et al. (especially Figures 1 and 3. Figure 3 shows the relationship of the innersole with respect to a user's foot whereas Figure 1 shows how far and where the support is located across the width of the innersole.). With respect to appellant's arguments about metatarsal support, this support can clearly be seen especially with the knowledge of foot structure that one of ordinary skill in the art would have (see 3 page attachment for location of metatarsals and compare with figures 1 and 3 of Schroer, Jr. et al.).

#### 2. Claim 3 is not patentable over Schroer, Jr. et al.

Appellant argues that claim 3 is patentable over Schroer, Jr. et al. does not teach the relationship between the elements of claim 3 and the human foot, especially a curve extending across a point generally corresponding to a cuboid of the foot as it extends posterior of the Astragalas (Talus). This is clearly shown when comparing Figures 1 and 3 with the 3-page attachment of common knowledge of location of the bones of the foot.

Arguments 4-13 further argue that particular locations of the sole of Schroer, Jr. et al. do not lie where claimed in the claims. These locations can clearly be seen with respect to Figures 1 and 3 and the common knowledge of the bones of the foot by one of ordinary skill in the art and as shown in the 3-page attachment. For reference to Tibialis Anticus, this would be the muscle running from the tibia to the first metatarsal and cuneiform bones.

#### B. Claims 7, 12 and 16 are not patentable over Schroer, Jr. et al.

Application/Control Number: 09/945,006

Art Unit: 3728

1. Appellant argues that the specific height claimed is not supported by Schroer, Jr. et al.

Although Schroer, Jr. et al. does not state a specific height for its support, it would be well within the

knowledge of one of ordinary skill in the art to determine the average arch height of a user, or the exact

arch height of a custom user, and make the height of arch support the height necessary to support the

user's arch. With respect to part 2, the arguments have been addressed immediately above. In regards to

part 3, it has been well known in the art of shoemaking to provide a liner, lining or top layer made of

textile inside a shoe to aid in wicking away sweat and making the shoe feel comfortable to the user (as

noted in the Final rejection).

Claims 42-43 and 45 are not patentable over Schroer, Jr. et al. and Official Notice. C.

With respect to parts 1-3, appellant argues that the finding of a material to meet ASTM standards

has not been taught by Schroer, Jr. et al. The arguments set forth in the Final office action that ASTM

standards are guidelines set that appellant finds necessary to meet does not meet the standard of

inventiveness. Therefore, the parameters of the materials appellant is claiming to meet the ASTM

guidelines are not inventive because they are set forth by a governing body.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals

and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

**Anthony Stashick** 

**Primary Examiner** 

AU 3728

Conferees: Mickey Yu

Supervisory Patent Examiner

AU 3728

Jila Mohandesi

Page 7

**Primary Examiner** 

AU 3728



@ 2001

Home

Mission

**Healing Arts** 

Chiropractic

Martial Arts

**Body Work** 

Products

**Book Store** 

Contact Us

Health Solutions
Naturally!



#### Office Hours:

M: 9 - 12 & 3 - 6

T: 9 - 1

W: 9 - 12 & 3 - 6

T: 9 - 12 & 3 - 6

F: 9 - 1

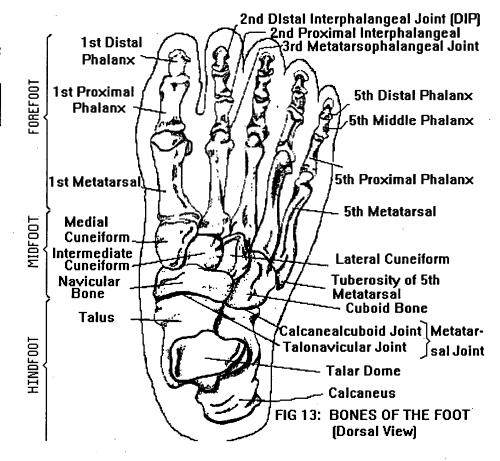
<u>Get your</u> Fortune Cookie

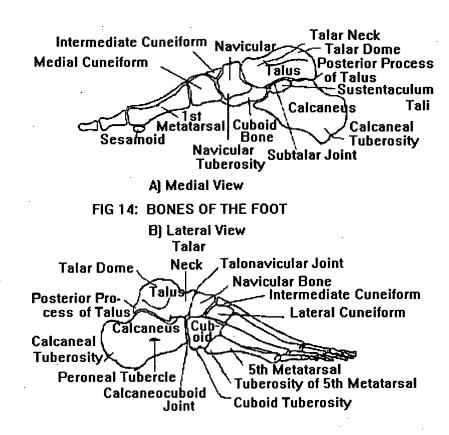


Anatomy 101

# FOOT AND ANKLE (see also Anatomy of the Joints)

The foot is considered to have three subdivisions: the forefoot (front part of foot, including toes), midfoot, and hindfoot (rear part of foot, including heel). The midfoot and hindfoot together are sometimes referred to as the tarsus, because they are composed of seven tarsal bones. The tarsal bones are irregular in shape and size; their interlocking shapes enable them to form a highly stable arrangement (the arches of the foot). The ankle is the joint between the tarsus and the lower leg. The bones of the forefoot, midfoot, and hindfoot are shown in Figures 13 & 14.





#### Forefoot:

The framework of the forefoot is formed by five metatarsal bones, along with the phalanges (the bones of the digits or toes). Each digit has three phalanges (proximal, middle, and distal), except for the big toe, which has two (proximal and distal). The digits and their metatarsal rays are numbered from one to five, starting with the big toe.

The metatarsals and phalanges are long bones. Each has a diaphysis (shaft) with slightly flaring ends. The proximal end or base of each bone has a smooth articular surface where it forms a joint with the adjacent bone. The distal end or head also has an articular surface, except for the distal phalanges, whose distal ends provide attachment for the soft tissue (pulp) of the digit tips.

Of the metatarsal bones, the first bears the most weight and plays the most important role in propulsion; it is therefore the shortest and thickest. It provides attachment for several tendons, including tibialis anterior and peroneus longus (see below, under Muscles and tendons). The fifth metatarsal has a tuberosity (protuberance) on the lateral side of its base, to which the peroneus brevis tendon is attached. (The tuberosity of the fifth metatarsal can be felt halfway along the lateral side of the foot.) The second, third, and fourth (called the internal metatarsals) are the most stable of the metatarsals, in part because of their protected position; but also because they have only minor tendon attachments, and therefore are not subjected to strong pulling forces.

#### The arches of the foot:

The foot has two important functions: weightbearing and propulsion. These functions require a high degree of stability. In addition, the foot must be pliable, so it can adapt to standing and walking on uneven surfaces. The multiple bones and joints of the foot give it pliability; however, such a segmented structure cannot bear weight unless the segments are arranged in the form of an arch.

The foot may be considered to have three arches. The medial longitudinal arch (of the medial border of the foot) is the highest and most important of the three arches (Figure 19A). It is composed of the calcaneus, talus, navicular, cuneiforms, and the first three metatarsals. The talus occupies the highest point of the arch; with its head wedged between the calcaneus and navicular, it is the "keystone" that holds the arch together. The lateral longitudinal arch (of the lateral border of the foot) is lower and flatter than the medial arch (Figure 19B). It is composed of the calcaneus, cuboid, and the fourth and fifth metatarsals, with the cuboid as the keystone. The transverse arch (at right angles to the longitudinal arches) is composed of the cuneiforms, the cuboid, and the five metatarsal bases. The wedge shapes of the cuneiforms help hold the transverse arch together.

The arches of the foot are maintained not only by the shapes of the bones themselves, but also by the ligaments that tie the bones together. In addition, muscles and tendons play an important role in supporting the arches (see under Muscles and tendons, below).